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## RAW SEQUENCE LISTING

**The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.**

Application Serial Number: 10/518,751  
Source: PCT  
Date Processed by STIC: 1-21-05

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PC1

## RAW SEQUENCE LISTING

DATE: 01/21/2005

PATENT APPLICATION: US/10/518,751

TIME: 17:28:31

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Output Set: N:\CRF4\01212005\J518751.raw

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5      Kinzler, Kenneth W.
6      Vogelstein, Bert
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9      MARKERS
11 <130> FILE REFERENCE: 001107.00358
C--> 13 <140> CURRENT APPLICATION NUMBER: US/10/518,751
C--> 13 <141> CURRENT FILING DATE: 2004-12-21
13 <150> PRIOR APPLICATION NUMBER: 60/390,187
14 <151> PRIOR FILING DATE: 2002-06-21
16 <160> NUMBER OF SEQ ID NOS: 10
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**VERIFICATION SUMMARY**

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L:13 M:270 C: Current Application Number differs, Replaced Current Application No  
L:13 M:271 C: Current Filing Date differs, Replaced Current Filing Date

## (12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

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Organization  
International Bureau



(43) International Publication Date  
31 December 2003 (31.12.2003)

PCT

(10) International Publication Number  
**WO 2004/001004 A2**

- (51) International Patent Classification<sup>7</sup>: **C12N**
- (21) International Application Number:  
PCT/US2003/019544
- (22) International Filing Date: 23 June 2003 (23.06.2003)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:  
60/390,187 21 June 2002 (21.06.2002) US  
60/458,959 1 April 2003 (01.04.2003) US
- (71) Applicant (*for all designated States except US*): **JOHNS HOPKINS UNIVERSITY SCHOOL OF MEDICINE** [US/US]; 100 N. Charles Street, 5th Floor, Baltimore, MD 21201 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (*for US only*): **ST. CROIX, Brad** [US/US]; 319 Lord Byron Lane #202, Cockeysville, MD 21030.5837 (US). **KINZLER, Kenneth, W.** [US/US]; 1403 Halkirk Way, Bel Air, MD 21015 (US). **VOGEL-STEIN, Bert** [US/US]; 3700 Breton Way, Baltimore, MD 21208 (US).
- (74) Agent: **KAGAN, Sarah, A.**; Banner & Witcoff, Ltd., 11th Floor, 1001 G Street, NW, Washington, DC 20001-4597 (US).
- (81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:**  
— *without international search report and to be republished upon receipt of that report*
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

(54) Title: MEMBRANE ASSOCIATED TUMOR ENDOTHELIUM MARKERS

(57) Abstract: To gain a better understanding of tumor angiogenesis endothelial cells (Ecs) were isolated and gene expression patterns were evaluated. When transcripts from Ecs derived from normal and malignant colorectal tissues were compared with transcripts from non-endothelial cells, over 170 genes predominantly expressed in the endothelium were identified. Comparison between normal-and tumor-derived endothelium revealed differentially expressed genes, including many that were specifically elevated in tumor-associated endothelium. Experiments with representative genes from this group demonstrated that most were similarly expressed in the endothelium of primary lung, breast, brain, and pancreatic cancers as well as in metastatic lesions of the liver. These results demonstrate that neoplastic and normal endothelium in humans are distinct at the molecular level.